--13. A method for the preparation of a modified self-protein derived from an animal species, including humans, and capable of inducing antibody response against the corresponding unmodified self-protein following administration of said modified self-protein to the animal species, which comprises

substituting, by molecular biological means, one or more peptide fragments of the self-protein by a corresponding number of peptides each containing at least one immunodominant T-cell epitope which is foreign to the animal species,

said substitution being carried out so as to essentially preserve the overall tertiary structure of the unmodified self-protein,

and confirming that the modified self-protein induces production of antibodies reactive with the unmodified self-protein in the animal species.

14. The method according to claim 13, wherein said immunodominant foreign T-cell epitope is inserted so as to preserve flanking regions from the original self-protein on both sides of the T-cell epitope.

15. The method according to claim 13, wherein said immunodominant T-cell epitope originates from tetanus toxoid or diphtheria toxoid.

16. An immunogenic composition which comprises

at least one modified self-protein which has been modified according to the method of claim 13; and

at least one immunologically acceptable adjuvant.

17. The immunogenic composition of claim 16, wherein the adjuvant is selected from the group consisting of calcium phosphate, saponin, quil A and biodegradable polymers.

18. The immunogenic composition according to claim 16, wherein the modified self-protein is fused to at least one suitable, immunologically active cytokine.

19. The immunogenic composition according to claim 18, wherein the immunologically active cytokine is selected from the group consisting of GM-CSF and interleukin 2.

20. The immunogenic composition according to claim 18, wherein the modified self-protein is a modified cytokine selected from the group consisting of modified TNF-α, modified TNF-β, and modified γ-interferon.

21. The immunogenic composition according to claim 18, wherein the modified self-protein is modified IgE.

22. A method for treating or ameliorating cachexia in an animal, including a human being, in need thereof, the method comprising administering, to the animal, an immunogenically effective amount of an immunogenic composition according to claim 20 which induces antibodies against TNF-α or γ-interferon.

23. A method for treating or ameliorating allergy in an animal, including a human being, in need thereof, the method comprising administering, to the animal, an immunogenically effective amount of an immunogenic composition according to claim 21.

24. A method for treating or ameliorating chronic inflammatory disease in an animal, including a human being, in need thereof, the method comprising administering, to the animal, an immunogenically effective amount of an immunogenic composition according to claim 20.

25. A method for treating or ameliorating diabetes mellitus in an animal, including a human being, in need thereof, the method comprising administering, to the animal, an immunogenically effective amount of an immunogenic composition according to claim 20 which induces antibodies against TNF-α.

26. A method for inducing antibody production in an animal against a self-protein of that animal, that method comprising administering, to the animal, an immunogenically effective amount of an immunogenic composition according to claim 16.

27. A modified self-protein which has been modified according to the method of claim 13.